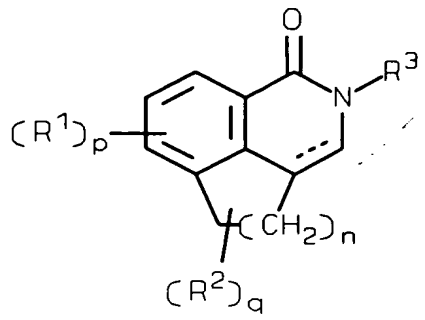
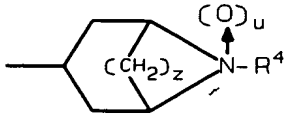
WE CLAIM:

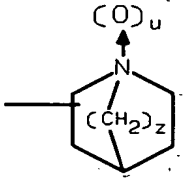
1. A compound of Formula I

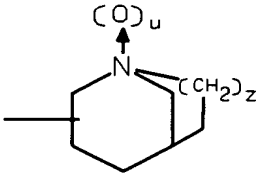


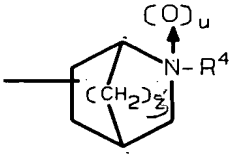
in which
the dashed line denotes an optional double bond;
n is 1, 2 or 3;
p is 0, 1, 2 or 3;
q is 0, 1 or 2;
each R^1 is independently selected from halogen, hydroxy, lower alkoxy, lower alkyl, nitro, amino, amino carbonyl, (lower alkyl)amino, di(lower alkyl)amino, and (lower alkanoyl)amino;
each R^2 is lower alkyl; and

R^3 is a group selected from Formulae (a), (b), (c) and (d):


(a)


(b)


(c)


(d)

in which

u is 0 or 1;

z is 1, 2 or 3; and

R^4 is C_{1-7} alkyl, C_{3-8} cycloalkyl, C_{3-8} cycloalkyl-C_{1-2} alkyl, or a group $(CH_2)_tR^5$ where t is 1 or 2 and R^5 is thienyl, pyrrolyl, or furyl, each optionally further substituted by one or two substituents selected from C_{1-6} alkyl, C_{1-6} alkoxy, trifluoromethyl or halogen, or is phenyl optionally substituted by one or two substituents selected from C_{1-4} alkoxy, trifluoromethyl, halogen, nitro, carboxy, esterified carboxy, and C_{1-4} alkyl optionally substituted by hydroxy, C_{1-4} alkoxy, carboxy, esterified carboxy or *in vivo* hydrolyzable acyloxy; the pharmaceutically acceptable salts, individual isomers, or mixtures of isomers thereof.

2. A compound of Claim 1 in which both q and u are 0, p is 0, 1 or 2, each R^1 is independently selected from halogen, lower alkoxy or amino and R^4 is lower alkyl.

3. A compound of Claim 2 in which p is 0, and R^4 is methyl.

4. A compound of Claim 3 in which R^3 is one of the following groups:

1-azabicyclo[2.2.2]oct-3-yl;
1-azabicyclo-[2.2.2]oct-4-yl;
endo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
exo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
endo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
exo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
endo-1-azabicyclo[3.3.1]non-4-yl; or
exo-1-azabicyclo[3.3.1]non-4-yl.

5. A compound of Claim 4 in which the optional bond is present.

6. A compound of Claim 5 in which n is 1.

7. A compound of Claim 6 in which R^3 is 1-azabicyclo[2.2.2]oct-3-yl, namely 2-(1-azabicyclo[2.2.2]oct-3-yl)-1,2,4,5-tetrahydro-cyclopent[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

8. A compound of Claim 7 which is (*S*)-2-(1-azabicyclo[2.2.2]oct-3-yl)-1,2,4,5-tetra-hydrocyclopenta[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

9. A compound of Claim 8 which is (*S*)-2-(1-azabicyclo[2.2.2]oct-3-yl)-1,2,4,5-tetrahydrocyclopenta[*de*]isoquinolin-1-one hydrochloride.

10. A compound of Claim 6 in which R^3 is 8-methyl-8-azabicyclo[3.2.1]oct-3-yl, namely, 2-(8-methyl-8-azabicyclo[3.2.1]-oct-3-yl)-1,2,4,5-tetrahydro-cyclopent[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

11. A compound of Claim 10 which is 2-(*endo*-8-methyl-8-azabicyclo[3.2.1]-oct-3-yl)-1,2,4,5-tetrahydro-cyclopent[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

12. A compound of Claim 11 which is 2-(*endo*-8-methyl-8-azabicyclo[3.2.1]-oct-3-yl)-1,2,4,5-tetrahydro-cyclopent[*de*]isoquinolin-1-one hydrochloride.

13. A compound of Claim 5 in which n is 2.

14. A compound of Claim 13 in which R^3 is 1-azabicyclo[2.2.2]oct-3-yl, namely 2-(1-azabicyclo[2.2.2]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

15. A compound of Claim 14 which is (*S*)-2-(1-azabicyclo[2.2.2]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

16. A compound of Claim 15 which is (*S*)-2-(1-azabicyclo[2.2.2]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one hydrochloride.

17. A compound of Claim 14 which is (*R*)-2-(1-azabicyclo[2.2.2]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

18. A compound of Claim 17 which is (*R*)-2-(1-azabicyclo[2.2.2]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or hydrochloride.

19. A compound of Claim 13 in which R^3 is 1-azabicyclo[2.2.2]oct-4-yl, namely 2-(1-azabicyclo[2.2.2]oct-4-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

20. A compound of Claim 13 in which R^3 is *endo*-9-methyl-9-azabicyclo[3.3.1]non-3-yl, namely 2-(*endo*-9-methyl-9-azabicyclo[3.3.1]non-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one.

21. A compound of Claim 13 in which R^3 is 8-methyl-8-azabicyclo[3.2.1]oct-3-yl, namely 2-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

22. A compound of Claim 21 which is 2-(*endo*-8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

23. A compound of Claim 21 which is 2-(*exo*-8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

73

24. A compound of Claim 13 in which R^3 is *endo*-1-azabicyclo[3.3.1]non-4-yl, namely 2-(*endo*-1-azabicyclo[3.3.1]non-4-yl)-2,3,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

25. A compound of Claim 5 in which n is 3.

26. The compound of Claim 25 in which R^3 is 1-azabicyclo[2.2.2]oct-3-yl, namely 2-(1-azabicyclo[2.2.2]oct-3-yl)-1,2,4,5,6,7-hexahydrocyclohept[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

27. A compound of Claim 4 in which the optional bond is absent.

28. A compound of Claim 27 in which n is 1.

29. A compound of Claim 27 in which n is 2.

30. A compound of Claim 29 in which R^3 is 1-azabicyclo[2.2.2]oct-3-yl, namely 2-(1-azabicyclo-[2.2.2]oct-3-yl)-2,3,3a,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one.

31. A compound of Claim 30 which is 2-(1-azabicyclo-[2.2.2]oct-3*S*-yl)-2,3,3a*S*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

32. A compound of Claim 31 which is 2-(1-azabicyclo-[2.2.2]oct-3*S*-yl)-2,3,3a*S*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one hydrochloride.

74

33. A compound of Claim 30 which is 2-(1-azabicyclo-[2.2.2]oct-3*S*-yl)-2,3,3a*R*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

34. A compound of Claim 33 which is 2-(1-azabicyclo-[2.2.2]oct-3*S*-yl)-2,3,3a*R*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one hydrochloride.

35. A compound of Claim 30 which is 2-(1-azabicyclo-[2.2.2]oct-3*R*-yl)-2,3,3a*S*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

36. A compound of Claim 35 which is 2-(1-azabicyclo-[2.2.2]oct-3*R*-yl)-2,3,3a*S*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one hydrochloride.

37. A compound of Claim 30 which is 2-(1-azabicyclo-[2.2.2]oct-3*R*-yl)-2,3,3a*R*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

38. A compound of Claim 37 which is 2-(1-azabicyclo-[2.2.2]oct-3*R*-yl)-2,3,3a*R*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one hydrochloride.

39. A compound of Claim 27 in which n is 3.

40. A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1 in combination with a pharmaceutically acceptable excipient.

41. A method for treating a condition chosen from emesis, a gastro-intestinal disorder, CNS disorder, a cardiovascular disorder and pain in an animal in need of such treatment, which method comprises administering a therapeutically effective amount of a compound of Claim 1 to such animal.

42. A method of Claim 41 in which the condition is a gastrointestinal disorder.

43. A method of Claim 41 in which the condition is a cardiovascular disorder.

~~44~~ 43. A method of Claim 41 in which the condition is pain.

45. A method of Claim 41 in which the condition is a CNS disorder.

~~46~~ 44. A method of Claim ~~45~~ 41 in which the condition is ~~anxiety/depression behavior~~ anxiety/depressive state.

~~47~~ 45. A method of Claim ~~46~~ 44 in which the condition is the side effects caused by withdrawal from an addictive substance.

~~48~~ 46. A method of Claim 41 in which the condition is emesis.

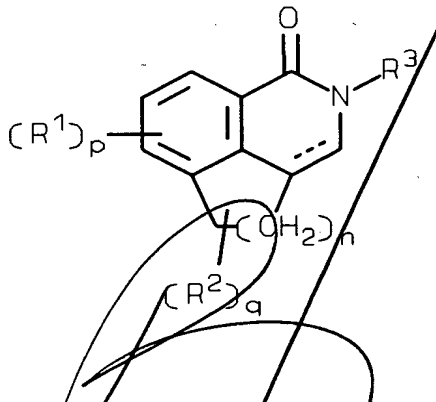
~~49~~ 47. A method of Claim ~~48~~ 46 in which the condition is emesis in humans undergoing cancer treatment with a cytotoxic pharmaceutical agent or radiation at levels sufficient to induce emesis, or recovering from surgical anesthesia or undergoing drug therapy in general in which a significant side effect is emesis.

50. A method of Claim 49 in which the compound is (*S*)-2-(1-azabicyclo[2.2.2]oct-3-yl)-2,4,5,6-tetrahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

51. A method of Claim 49 in which the compound is 2-(3*S*-1-azabicyclo-[2.2.2]oct-3-yl)-2,3,3a*S*,4,5,6-hexahydro-1*H*-benz[*de*]isoquinolin-1-one or a pharmaceutically acceptable salt thereof.

52. A method for treating an animal having a condition in which the 5-HT_3 receptor plays a role, which method comprises administering a therapeutically effective amount of a compound of Claim 1 to such animal.

53. A process for the preparation of a compound of Formula I:



I

in which
the dashed line denotes an optional double bond;
n is 1, 2 or 3;
p is 0, 1, 2 or 3;
q is 0, 1 or 2;
each R^1 is independently selected from halogen, hydroxy, lower alkoxy, lower alkyl, nitro, amino, amino carbonyl, (lower alkyl)amino, di(lower alkyl)amino, and (lower alkanoyl)amino;

each R^2 is lower alkyl; and

R^3 is a group selected from Formulae (a), (b), (c) and (d):

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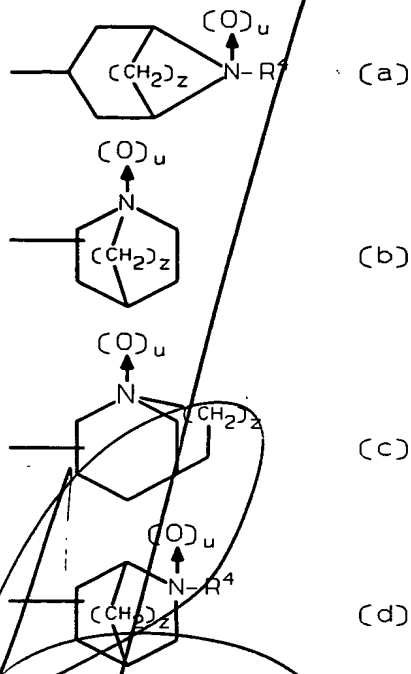


(a)

(b)

(c)

(d)

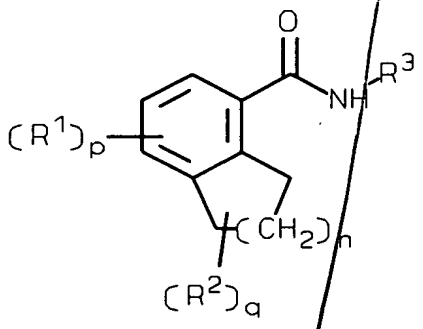
in which

u is 0 or 1;

z is 1, 2 or 3; and

R^4 is C_{1-7} alkyl, C_{3-8} cycloalkyl, C_{3-8} cycloalkyl-C_{1-2} alkyl, or a group $(CH_2)_tR^5$ where t is 1 or 2 and R^5 is thienyl, pyrrolyl, or furyl, each optionally further substituted by one or two substituents selected from C_{1-6} alkyl, C_{1-6} alkoxy, trifluoromethyl or halogen, or is phenyl optionally substituted by one or two substituents selected from C_{1-4} alkoxy, trifluoromethyl, halogen, nitro, carboxy, esterified carboxy, and C_{1-4} alkyl optionally substituted by hydroxy, C_{1-4} alkoxy, carboxy, esterified carboxy or *in vivo* hydrolyzable acyloxy; the pharmaceutically acceptable salts, individual isomers, or mixtures of isomers thereof, which process comprises

(1) reacting a compound Formula II:



II

in which n, p, q, R^1, R^2, and R^3 are as defined above with a formylating agent in the presence of a strong base and then acidifying to form a compound of Formula I in which the optional bond is present;

(2) optionally hydrogenating a compound of Formula I in which the optional bond is present to form a compound of Formula I in which the optional bond is absent;

(3) optionally reacting with or exchanging substituents present on a compound of Formula I to form an additional substituted compound of Formula I;

(4) optionally converting a salt of a compound of Formula I the a corresponding compound of Formula I;

(5) optionally converting a compound of Formula I to a corresponding pharmaceutically acceptable salt;

(6) optionally oxidizing a compound of Formula I in which u is 0 to the corresponding *N*-oxide;

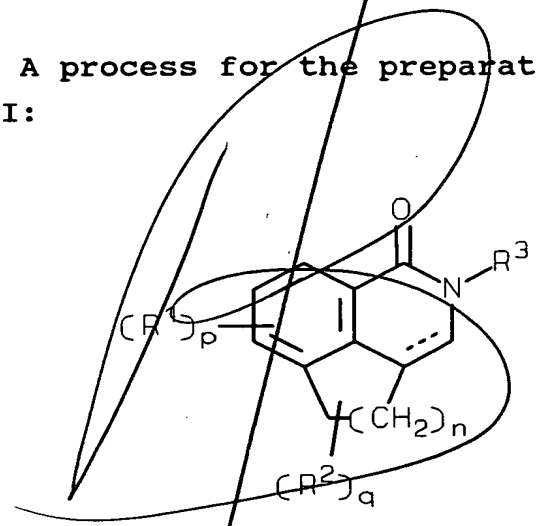
(7) optionally reducing the *N*-oxide of a compound of Formula I to the corresponding compound of Formula I wherein p is 0; or

(8) optionally separating a mixture of isomers of a compound of Formula I into a single isomer.

54. A process according to Claim 53 in which R^3 is one of the following groups:

1-azabicyclo[2.2.2]oct-3-yl;
1-azabicyclo-[2.2.2]oct-4-yl;
endo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
exo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
endo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
exo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
endo-1-azabicyclo[3.3.1]non-4-yl; or
exo-1-azabicyclo[3.3.1]non-4-yl.

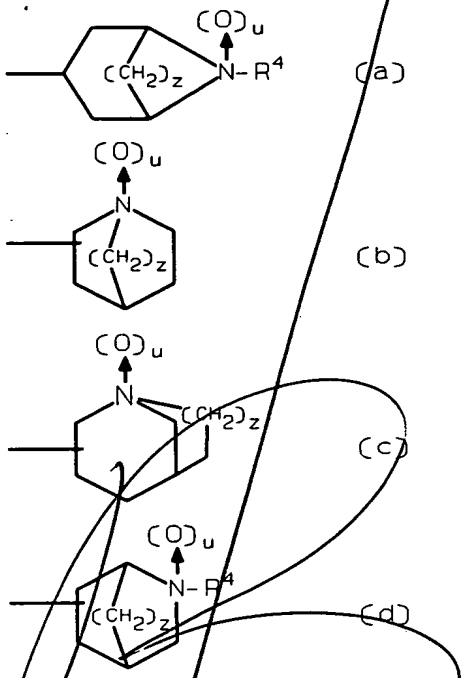
55. A process for the preparation of a compound of Formula I:



I

in which
the dashed line denotes an optional double bond;
n is 1, 2 or 3;
p is 0, 1, 2 or 3;
q is 0, 1 or 2;
each R^1 is independently selected from halogen, hydroxy, lower alkoxy, lower alkyl, nitro, amino, amino carbonyl, (lower alkyl)amino, di(lower alkyl)amino, and (lower alkanoyl)amino;
each R^2 is lower alkyl; and

R^3 is a group selected from Formulae (a), (b), (c) and (d):



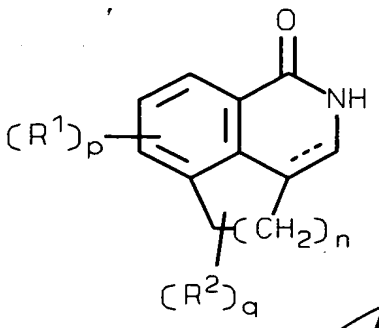
in which

u is 0 or 1;

z is 1, 2 or 3; and

R^4 is C_{1-7} alkyl, C_{3-8} cycloalkyl, C_{3-8} cycloalkyl-C_{1-2} alkyl, or a group $(CH_2)_tR^5$ where t is 1 or 2 and R^5 is thienyl, pyrrolyl, or furyl, each optionally further substituted by one or two substituents selected from C_{1-6} alkyl, C_{1-6} alkoxy, trifluoromethyl or halogen, or is phenyl optionally substituted by one or two substituents selected from C_{1-4} alkoxy, trifluoromethyl, halogen, nitro, carboxy, esterified carboxy, and C_{1-4} alkyl optionally substituted by hydroxy, C_{1-4} alkoxy, carboxy, esterified carboxy or *in vivo* hydrolyzable acyloxy; the pharmaceutically acceptable salts, individual isomers, or mixtures of isomers thereof, which process comprises

(1) reacting a compound of Formula IV:



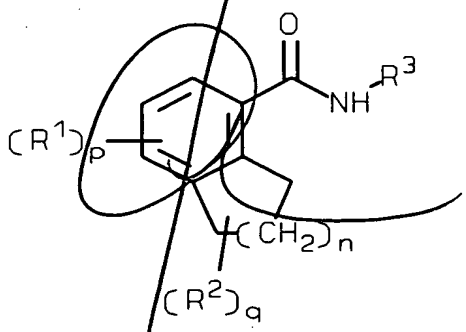
IV

in which n, p, q, R^1 and R^2 are as defined above with an alkylating agent of the formula R^3L, wherein R^3 is defined as above and L is defined as a leaving group, to form a compound of Formula I.

56. A process according to Claim 55 in which R^3 is a group selected from

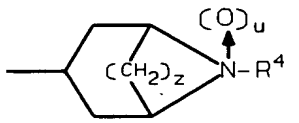
1-azabicyclo[2.2.2]oct-3-yl;
1-azabicyclo[2.2.2]oct-4-yl;
endo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
exo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
endo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
exo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
endo-1-azabicyclo[3.3.1]non-4-yl; and
exo-1-azabicyclo[3.3.1]non-4-yl.

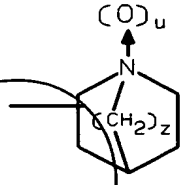
57. A compound of Formula II:

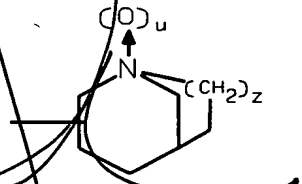


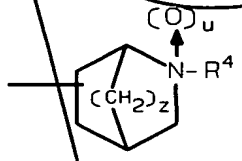
II

in which
n is 1, 2 or 3;
p is 0, 1, 2 or 3;
q is 0, 1 or 2;
each R^1 is independently selected from halogen, hydroxy, lower alkoxy, lower alkyl, nitro, amino, amino carbonyl, (lower alkyl)amino, di(lower alkyl)amino, and (lower alkanoyl)amino;
each R^2 is lower alkyl; and
R^3 is a group selected from Formulae (a), (b), (c) and (d):


(a)


(b)


(c)


(d)

in which
u is 0 or 1;
z is 1, 2 or 3; and
R^4 is C_{1-7} alkyl, C_{3-8} cycloalkyl, C_{3-8} cycloalkyl-C_{1-2} alkyl, or a group $(CH_2)_tR^5$ where t is 1 or 2 and R^5 is thienyl, pyrrolyl, or furyl, each optionally further substituted by one or two substituents selected from C_{1-6} alkyl, C_{1-6} alkoxy, trifluoromethyl or halogen, or is phenyl optionally substituted by one or two substituents selected from C_{1-4} alkoxy, trifluoromethyl, halogen,

nitro, carboxy, esterified carboxy, and C_{1-4} alkyl optionally substituted by hydroxy, C_{1-4} alkoxy, carboxy, esterified carboxy or *in vivo* hydrolyzable acyloxy; the pharmaceutically acceptable salts, individual isomers, or mixtures of isomers thereof.

58. A compound of Claim 57 in which both q and u are 0, p is 0, 1 or 2, each R^1 is independently selected from halogen, lower alkoxy or amino and R^4 is lower alkyl.

59. A compound of Claim 58 in which p is 0, and R^4 is methyl.

60. A compound of Claim 59 in which R^3 is one of the following groups:

1-azabicyclo[2.2.2]oct-3-yl;
1-azabicyclo-[2.2.2]oct-4-yl;
endo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
exo-9-methyl-9-azabicyclo[3.3.1]non-3-yl;
endo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
exo-8-methyl-8-azabicyclo[3.2.1]oct-3-yl;
endo-1-azabicyclo[3.3.1]non-4-yl; or
exo-1-azabicyclo[3.3.1]non-4-yl.